

(12) **United States Patent**  
**Summer**

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(54) **TONGUE GRASPING AND RESTRAINING APPARATUS AND METHODS**

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(57) **ABSTRACT**

A tongue grasping and restraining device holds the tongue securely during sleep in order to minimize the risk of the tongue slipping back and blocking the throat, a condition known as obstructive sleep apnea. Plural tongue gripping projections are coupled to upper and lower supports. The projections engage and hold the tongue. The upper and lower supports are biased toward one another into a tongue engaging position. The upper support is coupled to the user's upper jaw, for example, to a denture, dental appliance or by upper teeth engaging mechanisms. The lower support can be hinged or otherwise joined to the upper support or can be separate therefrom. A tube and rod mechanism in one embodiment couples the upper and lower supports together. Exemplary methods of manufacturing tongue gripping projections are also disclosed.

**22 Claims, 10 Drawing Sheets**

